



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Am

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,223	08/17/2000	Lory Molesky	1958.2005-000	4357

21005 7590 05/26/2005

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
530 VIRGINIA ROAD
P.O. BOX 9133
CONCORD, MA 01742-9133

EXAMINER

CHANNAVAJALA, SRIRAMA T

ART UNIT PAPER NUMBER

2166

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/641,223

Applicant(s)

MOLESKY ET AL.

Examiner

Srirama Channavajjala

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Previous Office action

1. Examiner acknowledges applicant's "REPLY" filed on 4/18/2005.
2. Claims 1-78 are pending in this application.
3. Claims 1,11,19,29,37,47,55,63,71 have been amended. [11/15/2004].
4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/15/2004 has been entered and a non-final Office action mailed on 12/15/2004.
5. Examiner acknowledges applicants' amendment filed on 10/6/2003, paper no. # 4.
6. Claims 55-78 have been added, paper no. # 4.
7. Claims 1-78 are pending in this application.

Drawings

8. The drawings filed on 10/6/2003, paper no. # 5 are approved by the Draftsperson under 37 CFR 1.84 or 1.152.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1- 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al., [hereafter Baker], US Patent No. 6338067 in view of Dobson et al., [hereafter Dobson], US Patent No. 6256628

10. As to Claims 1,19,37, Baker teaches a system which including 'storing a plurality of raw data values organized as a series in a first database structure' [fig 1-2, col 4, line 18-29], plurality of raw data values are integral part of Baker's fig 1-2 because Baker teaches database structure, fig 2, element 200 is equivalent to the database element 112, fig 1, further entering the data into the computer database transforming the data documenting a database structure that integrates the various measures such as data analysis [see fig 7], it is also important to note that the data analyst retain the original data records or information, data analyst should always be able to trace a result from a data analysis back to the original forms on which the data was collected which is integral part of Baker's teaching, therefore, raw data values are integral part of Baker's fig 1, element 100;

'series of raw data values' [col 5, line 44-52], Baker specifically directed to data entry system element 118 that is used to load information or data in each field or respective fields for example as listed in the table I;

'associating the first and second database structures so the adjustment value is applied to the series of raw data values in response to retrieval' [col 4, line 18-29, col 6, line 49-53, table I-II], first and second database structures corresponds to Baker's relational database linkage between the quantitative information records element 212 and the company records element 214, more specifically, Baker directed to database structure as detailed in fig 2, further table I and table II are example of database structure, associating the first and second database structure corresponds to linking various subsets of the data fields listed in table I&II.

It is however, noted that Baker et al. does not specifically teach 'plurality of intervals of adjusted data', 'each interval of adjustment data including an adjustment value to be applied to raw data values over a range specified in the series'. On the other hand, Dobson disclosed 'plurality of intervals of adjusted data' [col 2, line 66-67, col 3, line 1-5, fig 1], intervals of adjusted data corresponds to Dobson's data range segments as detailed in fig 1; 'each interval of adjustment data including an adjustment value to be applied to raw data values over a range specified in the series' [col 3, line 15-27, fig 1-2], Dobson specifically teaches data range segment interval, varying data segment range, adjusting the data range segments as detailed in col 3, line 15-27.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Dobson et al., into product/service hierarchy database for market competition and investment analysis of Baker et al. because they are both directed to organizing the data, more specifically Baker is directed to product hierarchy database organized in such a way that it is accessible to users for quantitative analysis, further Baker also suggests linking database structure [see Abstract, fig 1-2, table I&II], while Dobson is directed to data charting, more specifically displaying clustered data points in detail with respect to a data set [see Abstract] and both Dobson and Baker directed to analyzing data.

One of ordinary skill in the art at the time of the invention would have been motivated to modifying Baker et al., reference, more specifically fig 1 to incorporate Dobson et al., fig 1, that specifically identifies one or more clustered sets of data and determining data range segments for each cluster of data because that would have allowed users of Baker et al., product/service hierarchy database for market competition and investment analysis not only interactively adjust existing data range segments, or define new data range segments but also display in the form of chart for quick analysis of data as suggested by Dobson[see col 3, line 14-20].

11. As to Claims 11,29,47,55,63,71, Baker teaches a system which including 'storing a plurality of raw data values organized as a series in a first database structure' [fig 1-2, col 4, line 18-29], plurality of raw data values are integral part of Baker's fig 1-2 because Baker teaches database structure, fig 2, element 200 is equivalent to the database element 112, fig 1, further entering the data into the computer database transforming the data documenting a database structure that integrates the various measures such as data analysis [see fig 7], it is also important to note that the data analyst retain the original data records or information, data analyst should always be able to trace a result from a data analysis back to the original forms on which the data was collected which is integral part of Baker's teaching, therefore, raw data values are integral part of Baker's fig 1, element 100;

"for the time series, storing plurality of data' [see col 13, line 53-56, fig 7], Baker teaches time sensitive market value of product for example fig 7 is directed to time series such as 52 week, today, last 1 month and associated data that corresponds to time series data;

as noted from Baker, first and second database structures corresponds to Baker's relational database linkage between the quantitative information records element 212 and the company records element 214, more specifically, Baker directed to database structure as detailed in fig 2, further table I and table II are example of database structure, associating the first and second database structure corresponds to linking various subsets of the data fields listed in table I&II.

'creating view of the database' [see fig 1-2], creating views is a common knowledge in relational database art, because create table, create view(s), create schema, create domain and like are integral part of relational database(s), also it is noted that Baker specifically suggests for example query can be constructed by query manager fig 1, element 110, therefore, create table, create view(s) are integral part of Baker's teaching. Baker especially teaches for example relational database as detailed in fig 1 and 2, further Baker also teaches for example database structure that including various data entry fields such as detailed in table I&II, it is also noted that these tables are connected or joined or established relational linkage between table I&II [col 6, line 49-53].

'in response to a query, retrieval of the raw data from the database' [col 4, line 8-14, col 9, line 5-10], Baker teaches query manager, fig 1, element 110, more specifically query can be constructed to retrieve product, group analysis, comparisons and like as detailed above;

It is however, noted that Baker et al. does not specifically teach 'plurality of intervals of adjusted data', 'each interval of time-based adjustment data including an adjustment value to be applied to raw data values over a specified range in the series'. On the other hand, Dobson disclosed 'plurality of intervals of adjusted data' [col 2, line 66-67, col 3, line 1-5, fig 1], intervals of adjusted data corresponds to Dobson's data range segments as detailed in fig 1; 'each interval of adjustment data including an adjustment value to be applied to raw data values over a range specified in

the series' [col 3, line 15-27, fig 1-2], Dobson specifically teaches data range segment interval, varying data segment range, adjusting the data range segments as detailed in col 3, line 15-27.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Dobson et al., into product/service hierarchy database for market competition and investment analysis of Baker et al. because they are both directed to organizing the data, more specifically Baker is directed to product hierarchy database organized in such a way that it is accessible to users for quantitative analysis, further Baker also suggests linking database structure [see Abstract, fig 1-2, table I&II], while Dobson is directed to data charting, more specifically displaying clustered data points in detail with respect to a data set [see Abstract] and both Dobson and Baker directed to analyzing data.

One of ordinary skill in the art at the time of the invention would have been motivated to modifying Baker et al., reference, more specifically fig 1 to incorporate Dobson et al., fig 1, that specifically identifies one or more clustered sets of data and determining data range segments for each cluster of data because that would have allowed users of Baker et al., product/service hierarchy database for market competition and investment analysis not only interactively adjust existing data range segments, or define new data range segments but also display in the form of chat for quick analysis of data as suggested by Dobson[see col 3, line 14-20].

12. As to Claims 2,12,20,30,38,48, 56,64,72, the limitations of this claim have been noted in the rejection of Claim 1 above. In addition, Dobson disclosed 'computing the adjustment value for each interval of adjustment data in response to the addition of a subsequent interval of adjustment data' [col 3, 15-26, fig 1-2].

13. As to Claims 3,13,21,31,39,49, 57,65,73, the limitations of this claim have been noted in the rejection of Claim 1 above. In addition, Baker et al. disclosed 'first database and second database [see Baker: fig 1-2], further Baker disclosed 'mapping the second database structure to the first database structure' [Baker: fig 2, fig 6, table I&II, col 6, line 49-53], Baker specifically suggested for example relational database lineage between quantitative information records and company records.

14. As to Claims 4,40, the limitations of this claim have been noted in the rejection of Claim 1 above. In addition, Dobson et al. disclosed 'raw data values represent a time series' [see fig 1-2], raw data values represent a time series corresponds to values displayed over the chart as detailed in fig 1-2.

15. As to Claims 5,14,23,32,41,50, 58,66,74, the limitations of this claim have been noted in the rejection of Claim 4 above. In addition, Baker et al., disclosed 'time series tracks financial data' [see fig 7], financial data corresponds to various company stock(s) value with respect to daily, 52 week, last 1 month, last 3 month, year to data changes.

16. As to Claims 6-7,15-16,24-25,33-34,41-42,50-5158-59,66-67,75-76, Baker disclosed 'financial data is a currency valuation, securities valuation' [see fig 7], fig 7 clearly explains a table that displaying various stock symbols, and value of the stock with respect to time series.

17. As to Claims 9-10,17-18,27-28,35-36,45-46,53-54, 61-62,69-70,77-78, Dobson teaches a system which including 'adjustment data includes data for a pending adjustment' [fig 1-2, col1, line 53-56].

Response to Arguments

Applicant's arguments filed on 4/18/2005 with respect to Claims 1-78 have been fully considered, for examiners response, see discussion below:

- a) At page 14, claims 1-78, applicant argues that "Baker does not teach or suggest applying adjustment values (split values) to raw data values (security prices). Nor does Baker teach or suggest the claimed "adjustment data"
- b) At page 15-16, claim 1-78, applicant argues that "The office's response to Baker's deficiencies is off the mark. The fact that Baker may suggest various modules and data fields does not mean that Baker suggest the claimed "adjustment data" and the application of the "adjustment data" to raw values. Again, although Baker stores split data, it is never applied by Baker to adjust the stock price.
- c) At page 15-16, claims 1-78, applicant argues that "Baker provides split data but does not apply it to raw data values to yield an adjusted data value. Further, Baker provides no method of retrieving an adjusted data value. Nor does Dobson

As to the above argument [a-c], as best understood by the examiner, firstly Baker is directed to database for market competition and investment analysis, more specifically hierarchically organizing product database organizes company market performance and stock investment information [see Abstract], secondly, it is noted that Baker also specifically suggests database structure containing various modules for example quantitative module, qualitative module, product hierarchy, pricing module and like, the specific database structure is clearly disclosed in fig 2, element 200, further it is

noted that Baker also specifically defines various fields that related to various modules as detailed in table I-II and they are integral part of database structure. Thirdly, it is noted that Baker specifically directed to pricing module that containing various fields such as symbol field, security split history record, split date, security prices, last price, time of last price, 52 week high, 52 week low and like [see col 8, line 45-62].

In the office action, examiner specifically stated that creating views is a common knowledge in relational database art, because create table, create view(s), create schema, create domain and like are integral part of relational database(s), further it is noted that Baker specifically directed to database structure [see fig 1-2] and querying database too, therefore, at minimum Baker teaches database structure qualified for querying data.

It is however, noted that Baker et al. does not specifically teach 'plurality of intervals of adjusted data', 'each interval of adjustment data including an adjustment value to be applied to raw data values over a range specified in the series'. On the other hand, Dobson disclosed 'plurality of intervals of adjusted data' [col 2, line 66-67, col 3, line 1-5, fig 1], intervals of adjusted data corresponds to Dobson's data range segments as detailed in fig 1; 'each interval of adjustment data including an adjustment value to be applied to raw data values over a range specified in the series' [col 3, line 15-27, fig 1-2], Dobson specifically teaches data range segment interval, varying data segment range, adjusting the data range segments as detailed in col 3, line 15-27

Examiner notes that in the specification at page 5, line 9-14, fig 3 is directed to database tables of fig 2, more specifically, database table have various fields defined for example ticker symbol field 17-1, timestamp date field 17-2, high, low, closing prices of stock fields 17-3,17-4,17-5 respectively, while Baker et al. also teaches similar system having various data fields defined for example symbol, daily change, 52 week both High,Low fields, last 1 month both %change, Rank and like as detailed in fig 7. It is however, noted that applicant failed to specifically point out or discuss differences between prior art of Baker and Dobson and claimed limitations.

d) At page 15, claims 1-78, applicant argues that "Dobson is merely related to rendering data values on a display. In Dobson, the stored values of the data being displayed are never adjusted....Dobson, indeed, does not adjust the raw data values; only the data value representations.

e) At page 15, claim 1-78, applicant argues that while Dobson is purported to teach a plurality of intervals of adjustment data, the scaling adjustments to the rendered chart are done interactively. There is no suggestion or need for scale intervals and the like to be stored in a database

As to the above argument [d-e], as best understood by the examiner, Dobson is directed to data charting, more specifically, displaying clustered data points in detail [see Abstract], further, Dobson also teaches displaying data points in each segment,

Art Unit: 2166

defining new data range segments, adjusting, setting of data range segment scale attributes [see col 3, line 15-20]. It is also noted that in the specification, page 3, fig 1 is a data in graphical representation in time series. Dobson et al. also teaches similar system that including graphical representation of data values in a time series as detailed in fig 1-2, further, it is noted that applicant failed to specifically point out or discuss differences between Dobson et al. and claimed limitations.

Therefore, applicant's remarks are deemed not to be persuasive, and claims 1- 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al., US Patent No. 6338067 in view of Dobson et al., US Patent No. 6256628

Conclusion


The prior art made of record

- | | | |
|----|---------------|---------|
| a. | US Patent No. | 6338067 |
| b. | US Patent No. | 6256628 |
| c. | US Patent No. | 6195103 |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 703/872-9306 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

SC
Patent Examiner.
May 17, 2005


SRIRAMA CHANNAVAJJALA
PRIMARY EXAMINER